



The Ampex GS-80 is a compact recorder designed for audio, instrumentation or digital applications as well as process control, facsimile recording and machine control. The equipment is completely modular and can be used with 1, 2, 3, or 4 channels of electronics. Standard head configurations are 2-track or 4-track, quarter inch. Standard recorder contains two channels of either audio or NRZ electronics. Space is provided in electronic tray for two additional channels of plug-in electronics modules. All operating controls are accessible from front. Equipment meets mil specification MIL-I-26600 (RF interference). Total rack space 12-1/4".

| Description                                   | Type of Electronics | Tape Speeds (ips) | Line Frequency          | Order By Cat. No.        | Professional User Price |
|-----------------------------------------------|---------------------|-------------------|-------------------------|--------------------------|-------------------------|
| GS-80 Recorders<br>Two Channel,<br>Unmounted  | NRZ                 | 3-3/4 & 7-1/2     | 60 cps<br><u>50 cps</u> | 4018005-01<br>4018005-02 | \$ 2195                 |
|                                               |                     | 1-7/8 & 3-3/4     | 60 cps<br><u>50 cps</u> | 4018005-03<br>4018005-04 |                         |
|                                               |                     | 15/16 & 1-7/8     | 60 cps<br><u>50 cps</u> | 4018005-05<br>4018005-06 |                         |
|                                               |                     | 5-5/8 & 7-1/2     | 60 cps<br><u>50 cps</u> | 4018005-07<br>4018005-08 |                         |
|                                               | AUDIO               | 3-3/4 & 7-1/2     | 60 cps<br><u>50 cps</u> | 4018005-11<br>4018005-12 | \$ 2295                 |
|                                               |                     | 1-7/8 & 3-3/4     | 60 cps<br><u>50 cps</u> | 4018005-13<br>4018005-14 |                         |
|                                               |                     |                   |                         |                          |                         |
|                                               |                     |                   |                         |                          |                         |
|                                               |                     |                   |                         |                          |                         |
|                                               |                     |                   |                         |                          |                         |
| GS-80 Recorders<br>Four Channel,<br>Unmounted | NRZ                 | 3-3/4 & 7-1/2     | 60 cps<br><u>50 cps</u> | 1810943-11<br>1810943-12 | \$ 3380                 |
|                                               |                     | 1-7/8 & 3-3/4     | 60 cps<br><u>50 cps</u> | 1810943-07<br>1810943-08 |                         |
|                                               |                     | 15/16 & 1-7/8     | 60 cps<br><u>50 cps</u> | 1810943-05<br>1810943-06 |                         |
|                                               |                     | 5-5/8 & 7-1/2     | 60 cps<br><u>50 cps</u> | 1810943-09<br>1810943-10 |                         |
|                                               |                     |                   |                         |                          |                         |
|                                               | AUDIO               | 3-3/4 & 7-1/2     | 60 cps<br><u>50 cps</u> | 1810943-03<br>1810943-04 | \$ 3630                 |
|                                               |                     | 1-7/8 & 3-3/4     | 60 cps<br><u>50 cps</u> | 1810943-01<br>1810943-02 |                         |
|                                               |                     |                   |                         |                          |                         |
|                                               |                     |                   |                         |                          |                         |
|                                               |                     |                   |                         |                          |                         |

| Description                                                             | Type of Electronics | Tape Speeds (ips)              | Line Frequency          | Order By Cat. No.        | Professional User Price |
|-------------------------------------------------------------------------|---------------------|--------------------------------|-------------------------|--------------------------|-------------------------|
| GS-80 Recorders<br>One Channel,<br>Two Track                            | NRZ                 | 3-3/4 & 7-1/2                  | 60 cps<br><u>50 cps</u> | 1810942-11<br>1810942-12 | \$ 1890                 |
|                                                                         |                     | 1-7/8 & 3-3/4                  | 60 cps<br><u>50 cps</u> | 1810942-07<br>1810942-08 |                         |
|                                                                         |                     | 15/16 & 1-7/8                  | 60 cps<br><u>50 cps</u> | 1810942-05<br>1810942-06 |                         |
|                                                                         |                     | 5-5/8 & 7-1/2                  | 60 cps<br><u>50 cps</u> | 1810942-09<br>1810942-10 |                         |
|                                                                         |                     |                                |                         |                          |                         |
|                                                                         |                     |                                |                         |                          |                         |
|                                                                         |                     |                                |                         |                          |                         |
|                                                                         |                     |                                |                         |                          |                         |
|                                                                         | AUDIO               | 3-3/4 & 7-1/2                  | 60 cps<br><u>50 cps</u> | 1810942-03<br>1810942-04 | \$ 1955                 |
|                                                                         |                     | 1-7/8 & 3-3/4                  | 60 cps<br><u>50 cps</u> | 1810942-01<br>1810942-02 |                         |
|                                                                         |                     |                                |                         |                          |                         |
|                                                                         |                     |                                |                         |                          |                         |
| GS-80 Recorders<br>Three Channel,<br>Four Track                         | NRZ                 | 3-3/4 & 7-1/2                  | 60 cps<br><u>50 cps</u> | 1810941-11<br>1810941-12 | \$ 3090                 |
|                                                                         |                     | 1-7/8 & 3-3/4                  | 60 cps<br><u>50 cps</u> | 1810941-07<br>1810941-08 |                         |
|                                                                         |                     | 15/16 & 1-7/8                  | 60 cps<br><u>50 cps</u> | 1810941-05<br>1810941-06 |                         |
|                                                                         |                     | 5-5/8 & 7-1/2                  | 60 cps<br><u>50 cps</u> | 1810941-09<br>1810941-10 |                         |
|                                                                         |                     |                                |                         |                          |                         |
|                                                                         |                     |                                |                         |                          |                         |
|                                                                         |                     |                                |                         |                          |                         |
|                                                                         |                     |                                |                         |                          |                         |
|                                                                         | AUDIO               | 3-3/4 & 7-1/2                  | 60 cps<br><u>50 cps</u> | 1810941-03<br>1810941-04 | \$ 3285                 |
|                                                                         |                     | 1-7/8 & 3-3/4                  | 60 cps<br><u>50 cps</u> | 1810941-01<br>1810941-02 |                         |
|                                                                         |                     |                                |                         |                          |                         |
|                                                                         |                     |                                |                         |                          |                         |
| Electronic Modules                                                      | NRZ                 | Any                            | 50/60                   | 4020241-01               | \$ 335                  |
|                                                                         | AUDIO               | 3-3/4 & 7-1/2<br>1-7/8 & 3-3/4 | 50/60<br>50/60          | 4020240-01<br>4020240-02 | \$ 395                  |
| Rack Tray Assembly: Accepts 1-4 modules.                                |                     |                                |                         | 4020239-01               | \$ 425                  |
| <u>GS-80 Accessories</u>                                                |                     |                                |                         |                          |                         |
| Speed-Frequency Conversion Kits:                                        |                     |                                |                         |                          |                         |
| To 60 cps, 3-3/4 & 7-1/2 ips                                            |                     |                                |                         | 4012991-04               | \$ 50                   |
| " 1-7/8 & 3-3/4 ips                                                     |                     |                                |                         | 4012991-05               | 65                      |
| " 15/16 & 1-7/8 ips                                                     |                     |                                |                         | 4012991-06               | 60                      |
| " 5-5/8 & 7-1/2 ips                                                     |                     |                                |                         | 4012991-09               | 80                      |
| To 50 cps, 3-3/4 & 7-1/2 ips                                            |                     |                                |                         | 4012991-01               | 50                      |
| " 1-7/8 & 3-3/4 ips                                                     |                     |                                |                         | 4012991-02               | 65                      |
| " 15/16 & 1-7/8 ips                                                     |                     |                                |                         | 4012991-03               | 60                      |
| " 5-5/8 & 7-1/2 ips                                                     |                     |                                |                         | 4012991-08               | 80                      |
| 15/16, 1-7/8, 3-3/4, 5-5/8, 7-1/2,<br>either 50 or 60 cps, NRZ or Audio |                     |                                |                         | 4012991-07               | \$ 270                  |
| 1-7/8, 3-3/4, 7-1/2, either 50 or<br>60 cycle-Audio only.               |                     |                                |                         | 4012991-10               | \$ 240                  |
| Equalizers: 7-1/2 ips                                                   |                     |                                |                         | 4020246-01               | \$ 18.00                |
| record/playback, 3-3/4 ips                                              |                     |                                |                         | 4020246-02               | 18.00                   |
| audio. 1-7/8 ips                                                        |                     |                                |                         | 4020246-03               | 18.00                   |
| GS-80 Manual                                                            |                     |                                |                         | 4890159-10               | 7.00                    |

Ampex 600 Series recording tape recommended for optimum performance.

Ampex equipment may be purchased or leased under special Ampex Finance Plans.

## Preliminary Specification

### Analog Delay System

DDI Type #607E-1000

#### Delay Range

- a) fixed delay per section
- b) variable delay per section

100 us to over 100 ms  
10 ms max  
33 us max

#### Frequency response:

$\pm 1$  db, 20 Hz to 20 kHz

#### Interface impedance:

600 ohms, balanced or  
unbalanced available

#### Dynamic range:

0 dbm to -40 dbm

#### Input level:

0 dbm max

#### Output level:

0 db<sub>m</sub> max

#### Noise (quiescent):

-50 dbm

#### Distortion:

5% max

#### Power:

+12 v, 1% reg  
-12 v, 1% reg.

#### Mounting:

mountable in 19" relay rack

#### Connector:

UHF type

#### Size:

7 1/2" height of 19" rack (up to 50 ms)  
add 1" per 10 ms additional delay

Preliminary Specification

Analog Delay System

DDI Type #607E-1000

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Multiple output option:

Outputs may be obtained at the output of any delay section by adding an additional output discriminator.

PAB

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